

USAF Declass/Release Instructions On File

REVISED DRAFT

9 March 1951

Review of this document by CIA has determined that

NIE-30: SOVIET CAPABILITIES TO INTERFERE WITH U.S. DEFENSE INFORMATION OF CIA

CIA has no objection to declass

Interest that must remain

classified at TS S

Authority: HR 70-2

It contains nothing of CIA Interest

Date 9 Mar 51 Reviewer CS/14

1. Soviet capabilities to interfere with the delivery of atomic bombs

by U. S. forces to targets within the Soviet Union depend upon the effectiveness of two major Soviet military organizations -- the Anti-Air Defense Forces and the Long Range Air Force -- and, to a lesser extent, upon the effectiveness of para-military Communist activities outside the Soviet Union. The Anti-Air Defense organization, which includes interceptor aircraft units, anti-aircraft forces and the early warning organization, would be responsible for ~~defense~~ ^{defense} against U. S. bombers once they penetrate Soviet-controlled territory. The Soviet Union would make a determined effort to blunt the American atomic attack by sabotage and subversion at Strategic Air Command bases, bomb storage sites, and other comparable targets before and while the United States is launching its atomic attack against Soviet targets. This Communist underground activity

^{could} be supplemented if necessary with air attacks by the Soviet Long Range Air Force. ^{on such targets} ^{The Communist underground probably has the capability of warning the USSR of the decision to launch an atomic attack before its implementation & of warning the defense forces when planes are airborne.}

2. Even though a very high priority seems to have been given to the task of creating defenses against an American atomic offensive, ~~the Soviet Union~~ ^{and we believe that the Soviet} Union has been ~~only~~ partially successful in overcoming the major problems posed by the great geographic expanse to be protected, the communications load which an effective air defense system involves, the limited capabilities of the Soviet electronics industry, the relatively low level of Soviet technical maintenance, and the training requirements for a vast defense network.

3. Reliable information as to the state of Soviet defensive capabilities is extremely limited, but on the basis of admittedly inadequate data, the following estimates are considered reasonable:

a. The Soviet Union possesses some 2,500 jet fighters in operational units, approximately half of which are assigned to defense regiments. Although

*This estimate assumes the political decision to use atomic weapons will have been made, so does not consider possible Soviet political and propaganda moves intended to prevent such a decision.

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these would be excellent day interceptor aircraft, the U. S. S. R. at present is ^{probably} handicapped ~~materially~~ in the bomber interception field by ^{shortage} ~~lack~~ of effective ground control interception radars and ^{lack of} efficient all-weather interceptor aircraft. ^{*} The Soviets have large numbers of anti-aircraft guns, ^{against the USSR conducted at altitudes} and air operations up to 25,000 feet, using tactics, similar to those employed during World War II, probably would encounter effective fire from antiaircraft artillery. Less effective fire would be encountered at altitudes above 25,000 feet. ^{and} ~~but~~ continuously pointed fire ^{need} ~~should~~ not be expected above 30,000 feet. ^{at present}

b. A ^{regularly equipped} ~~good~~ all-weather interceptor may be introduced in 1952 and technical difficulties with ground control interception radars could be largely overcome by that time, ^{Even then} ~~By 1952 the Soviet Union should have reached~~ ^{developed to} ~~produce the~~ ^{necessary} ~~amount of equipment sufficient to provide a moderately effective fighter~~ ^{The Soviet} defense system, ^{would still have} ~~but~~ still having limited capabilities in bad weather: ^{at night,} ~~or~~ against bombers operating at altitudes as high as 40,000 feet. ^{degradation} ~~tactics such~~ ^{or running tactics might} ~~as running~~ ^{pose a potential threat, the effectiveness of which cannot be estimated.}

c. It seems probable that the Soviet Union, appreciating the importance of air defense, will have pressed on with the development of a supersonic surface-to-air guided missile on similar lines to the German Wasserfall. It is thought that this will not be developed satisfactorily before the end of 1952. By the end of 1954, assuming no serious difficulties, the missile might be developed for military use with pilot production completed.

d. German type sub-sonic missiles could be available to the Soviet Union for limited surface-to-air use as early as 1951. However, such missiles would be relatively ineffective against modern bombers.

e. It may be within Soviet capabilities to develop an effective supersonic air-to-air missile by 1954, but no knowledge of Soviet activities in this respect is available.

f. The Soviet Union is capable now of producing improved versions of the German Taifun-type supersonic antiaircraft rockets which were designed to be effective against aircraft at altitudes up to at least 50,000 feet.

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Although there is little factual evidence that such production has commenced, the weapon is a logical choice for the Soviet Union because of ease of manufacture, operational mobility and minimized electronic requirements.

Operationally significant quantities could be available for employment about one year after the decision to manufacture this weapon had been made. The effectiveness of Taifun would be reduced about 50 per cent if radar directors could be jammed. It is believed that the ground radar at present available to the Soviet Union is vulnerable to jamming.

3 // The Soviet Union has and will continue to have the capability in aircraft and trained crews to enable it to launch against North America and the United Kingdom the full stockpile of atomic bombs that are and will become available. In the next few years the strategic bombing capability of the Soviet Long Range Air Force will increase substantially, particularly in view of the growing atomic bomb stockpile and the increasing numbers of conventional medium bombers. Further improvement in effectiveness of the Soviet Long Range Force may be anticipated with expected introduction of jet medium bombers in 1952 and possibly heavy bombers in 1953, although the problems connected with high speed bombing and navigation probably will not be fully solved by the Soviets by that time.

5. In view of the threat which an American atomic offensive would pose to the security of the Soviet Union in the event of major hostilities, it should be expected that blunting this atomic offensive at the source -- before it could be launched -- would be a high priority task of the Soviet Union. If surprise could be achieved, this probably would warrant expenditure of at least a portion of the stockpile of Soviet atomic bombs against Strategic Air Command bases or comparable targets in the United States and against overseas bases which cannot be reached by Soviet light bombers or neutralized by Communist saboteurs.

6. The progress now being made in the intelligence field and with the radar warning screen reduces to a reasonable degree the chances that the Soviet Union would achieve the complete surprise in air attacks against the United States that it would wish.

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7. Tightened security precautions and steadily improving U. S. counter-intelligence capabilities are strengthening protection against clandestine attack and sabotage. Continued tightening of security measures will enhance the likelihood that this threat to U. S. security can be controlled.

8. Even if Soviet air defenses proved to be more effective than current estimates would indicate, we believe that the Soviet Union is not presently capable of preventing accomplishment of the objectives of the planned U. S. atomic offensive. Assuming a continued American effort in this field, the ability of the United States to improve its capabilities for delivery of atomic weapons to targets within the U.S.S.R. can reasonably be expected to keep pace with anticipated improvements in Soviet defensive capabilities.

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Auth: CS, USAF

2.S. CONT. #
D.I. HQ USAF

9 March 1951

REVISED DRAFTNIE-30: SOVIET CAPABILITIES TO INTERFERE WITH US DELIVERY 53254
OF ATOMIC WEAPONS TO TARGETS IN THE USSR*

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2. Even though a very high priority seems to have been given to the task of creating defenses against an American atomic offensive, the Soviet Union has been only partially successful in overcoming the major problems posed by the great geographic expanse to be protected, the communications load which an effective air defense system involves, the limited capabilities of the Soviet electronics industry, the relatively low level of Soviet technical maintenance, and the training requirements for a vast defense network.

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b. A good all-weather interceptor may be introduced in 1952 and technical difficulties with ground control interception radars could be largely overcome by that time. By 1952 the Soviet Union should have reached a state of equipment sufficient to provide a moderately effective fighter defense system, but one still having limited capabilities in bad weather and against bombers operating at altitudes as high as 40,000 feet.

c. It seems probable that the Soviet Union, appreciating the importance of air defense, will have pressed on with the development of a supersonic surface-to-air guided missile on similar lines to the German Wasserfall. It is thought that this will not be developed satisfactorily before the end of 1952. By the end of 1954, assuming no serious difficulties, the missile might be developed for military use with pilot production completed.

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